

# IOWA CONSERVATIONIST

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Number 11

## ONE MILLION WALNUTS BEING PLANTED

### WILD DUCKS CALLING Five Year Goal of 5 Million New Trees on State Land

By Roy L. Abbott  
Department of Science  
Iowa State College

"Whither midst falling dew,  
While glow the heavens with the  
last steps of day,  
Far through their rosy depths  
dost thou pursue  
Thy solitary way?"

Who among us duck hunters and nature lovers generally, young or old, hasn't had something of that same feeling on seeing a lone duck or goose or a whole flock of them for that matter, go cruising high overhead to become mere vanishing dots as our wistful eyes finally lost them in the autumn haze? Most of us, of course, didn't sit down and write a poem about it as Bryant did to the lone waterfowl he saw, but our souls were stirred none the less, with sharp but indefinable longings.

For my own part, even while husking corn, my young eyes were so busy searching the heavens for ducks, I often missed the wagon box. I can hear father's voice even now, affirming in no uncertain terms that if I would keep my mind on my work, I would hit the wagon box more often. But how could he expect a boy to keep his mind on his work with wild ducks overhead?

For half a mile from our farm, there was a swamp with long lines of red rushes fringing ponds of brown water with cattails and lily pads, and muskrats—a veritable duck haven. My body was there in the cornfield, but my mind and soul were down there in the swamp belly-crawling through the reeds, or crouched in a blind awaiting the soft winnowing of wings overhead. Even in summer, I used to go down there to watch day come to the swamp. You all know the picture:

It is early morning, the June sun yet half an hour deep behind yonder black woods. From my vantage point in a thick clump of cattails that fringe the long slough, I peer cautiously. The swamp is awakening; those red rays shoot-

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Conservation Commission employees have harvested a million walnuts which have been shipped in truckload lots for planting in areas where suitable state lands are present.

Jim Sherman Photo.

By James R. Harlan  
Assistant Director

Under a plan inaugurated by the State Conservation Commission in September of this year, walnut timber will become more abundant on state-owned forests, park, and wildlife lands. For the next five years a goal of 5 million plantings has been set. Two hundred twenty-three thousand fall planted nuts are in the ground and planting will continue through the winter and spring.

Faced with a bumper crop of nuts, Conservation Commission employees have harvested a million walnuts. The nuts, gathered in areas of abundance were shipped in truckload lots to areas where suitable state lands are present. The actual planting this fall has been done by Conservation Commission crews. In the spring sportsmen's groups, Boy Scouts, Future Farmers, 4-H Club members, and others will be enlisted in the planting program.

Walnut lumber is one of the most valuable and profitable of native trees. During the past several decades walnut timber has been cut faster than it has been grown in the Hawkeye state. Gun stocks for two World Wars has helped deplete the supply and walnut for the finest in furniture, plus many other uses keeps continuous pressure on available supplies.

Walnut trees planted in 1900 now measure as much as 20 inches in diameter. Number one prime walnut logs from trees this size are worth up to \$66. Such a growing walnut tree added \$1.30 to its owner's capital assets each 365 days over its 50-year life span. On the best bottomland 300 prime walnut trees can mature on each acre.

Walnut, in addition to being a valuable wood producer, is of great importance in the production of timber squirrels. In every timber

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### Variations and Hybrids of the Ringneck Pheasant

By Eugene Knoder

Within the past several years a number of national magazines have carried articles about chicken and pheasant hybrids. Local newspapers almost annually have a short article and picture of suspected hybrids, many of which are not. I have heard many goodnatured arguments about these hybrids; what color are they, whether or not they are fertile, do they look like pheasants or chickens, can they fly—these are but a few of many controversial questions asked.

Most chicken and pheasant hybrids are produced when a hen of the small variety of chickens, such as a bantam or one of the game

breeds, is allowed to wander freely around the farm and comes in contact with a cock pheasant. This is especially true when there are no chicken roosters with which the hen may mate. Matings with hens of larger breeds are not only physically impossible, but are prevented due to "instinctive" mating behavior, especially on the part of the cock. When such matings are made by artificial insemination the fertility of the eggs is very low and the embryos die before hatching.

Although there are many reports to the contrary, no reliable investigator has reported a fertile chicken and pheasant hybrid. Sev-

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## TAPS FOR BOOTS

By Thomas M. Kelly

Canine taps were blown last week for Boots, the Chas. Spies 14-year-old Labrador who managed to raise nine Spies youngsters in between hunting seasons. You'll find pretty good companions, Boots, in these celestial fields and woods and streams where all good pooches go. We expect you'll prefer to hunt every day in the year. You'll probably rub shoulders with a few of our former cronies from time to time. There'll be Fritz, the Airdale, who'll be spending his days barking at colored people. Darndest trait we ever saw in a dog. Old Sheik will be squatting on his haunches while someone feeds him artichokes all day long. When you notice a big black Newfoundland doing nothing but riding around in the back of a car days without end, that will be Topsy. There'll be no one to open the door and sternly order her out on bridge club days when the car has just been cleaned and dusted. Pay no attention to a fire whistle that will be blowing five times every day.



Canine taps were blown last week for Boots.

## THE SHOOT PARADE

In a recent survey of the comparative popularity of different game species and the percentage of sporting ammunition used in hunting each type of game, a well-known arms manufacturing company came up with some interesting figures which place the squirrel the number two target for shotgun shells. These figures do not include the percentage of .22 caliber bullets fired in his direction, but he unquestionably ranks high in that respect.

Topping the list in shotgun consumption is the cottontail rabbit. More than 29 per cent of the shotgun shells manufactured each year are consumed in hunting this fleet-footed little fellow who is the most prolific of all game animals. Even though more than twice as many shotgun shells are fired at rabbits as at squirrels, the squirrel ranks second with a percentage of 14, about on the par with the bobwhite quail.

The figures reveal that the annual shotgun shell production is consumed in the following manner:

Rabbit .....	29.6%
Squirrel .....	14
Quail .....	13.9
Duck and Geese .....	10.5
Pheasant .....	9.5
Doves .....	7
Other Game .....	3.5

88.0%

Trap and Skeet .....

12.0

100.0%

That's for Wiggles, a white pit bull who loved to beat the volunteer fire department to the station house for every fire around here years ago. We expect there will be at least two cats for each one of you to tree in off moments. We say it grudgingly, but you've all probably decided by now that you never had it so good around here. Good hunting, Boots!—Emmetsburg Reporter.



Many common everyday phrases and expressions originate from the use of the early-day muzzle loading guns.

## ECHOES FROM THE PAST "SHOOT THE WORKS"

Many common everyday phrases and expressions are often glibly and comfortably employed with little thought as to their antecedents or origin. Frequently these expressions endure for generations simply because of the succinct way they reduce a description into a small flavorful capsule. Present usage, however, may bear little or no relation to the original or specific meaning.

"A very fertile source of such expressions is to be found in the fields of guns and shooting," says W. G. Burckel, process engineer of the Remington Arms Company, Inc. "In the days when gun, powder horn and shot pouch were almost as necessary as pants—and often provided them—a lore came into being that colors our thought and speech to this day, adding crispness to our expressions when used in connection with matters far afield from arms and ammunition.

"Suppose we examine a couple, with comparisons of their present-day usage and original meaning. Take the expression 'Lock, stock and barrel.' When one accepts a proposition 'lock, stock and barrel' it means that he accepts the matter in its entirety, without reservation. The expression stems from the colonial days when a gun, once acquired, was seldom scrapped or disposed of for a new one. Instead, when a part wore out or was broken, a new part was made or procured, such as the trigger and hammer assembly (the lock) or perhaps a new barrel. Therefore, when it was desired to emphasize completeness of anything, the essential parts of an essential article were itemized . . . 'lock, stock and barrel', the whole gun.

"Today we use, in a derogatory sense, the statement 'He is just a flash in the pan.' This signifies that the person referred to is one who makes a big fuss, is noisily enthusiastic but whose actions are inconsequential. Or it refers to an individual who accomplishes something worthwhile once, but only

once. A 'flash in the pan' was much worse for the pioneer armed with a flint lock musket or rifle when he stood face to face with an angry bear or when meat for the family stood poised for flight only a few yards away. If, at such a time, he pulled the trigger and the priming powder in the pan at the breech merely burned with a flash without discharging the gun the shooter was the victim of an embarrassing, disgusting, and sometimes even tragic, experience.

"Here are a few of the common expressions of today that originated in the lingo of shooting. A little fanning of the embers of memory will undoubtedly recall many more.

"Lock, stock and barrel, flash in the pan, our plans misfired, set your sights high, scored a bulls-eye, draw a bead on something.

Keep your powder dry, fall short of the mark, straight as a ramrod, overshot the mark, loaded for bear, sharpshooter.

"Goes off half-cocked, all primed for the occasion, hair-trigger nerves, hold your fire, a straight-shooter, hit dead center, lined his sights on."—Remington News Letter.

## PORTABLE ICE BOX SAVES GAME IN HOT WEATHER

Very few hunters will bother to go rabbit hunting this early in the season because of the old-timers' rule that rabbits aren't fit to eat until the snow flies. This rule had a certain amount of truth in it in the days before ice boxes—and other cold storage.

Today a hunter can take a small, portable ice box or a large insulated jug partly filled with ice and dress his game as he gets it. This way the meat will be just as good eating as if he had waited for mid-winter.—Russ Graham, Cedar Rapids Gazette.

Beavers will commonly spend hours combing their fur, spreading oil over the outer hairs much as certain birds oil their feathers.

Jim Sherman Photo.



## LEDGES PARK

By Charles S. Gwynne  
Associate Professor  
Department of Geology  
Iowa State College

The Ledges Park is named from the prominent ledges of rock which crop out in many places. These ledges are unusual for this part of Iowa and early attracted attention. The area became one of picnicking and recreation long before it was set aside as a state park.

The park includes an area of over two square miles. It is located on the east side of Des Moines River about three miles south of Boone. Pease Creek and its tributaries flow in deep valleys through the area. The valleys are deep and the sides are steep even where there are no ledges outcropping.

This park got its start, one might say, back in the time when the coal beds of Iowa were being formed. For a while shallow seas would transgress over what was then the land and sediments would be deposited in them. These would later harden to limestone and shale. Then the seas would withdraw and swamps would develop in the depressed areas along the low-lying coast. Peat would pile up in these. Another spreading of the sea would bring more sediments on top of the peat. In the course of the ages the peat would gradually be converted to coal.

So far nothing has been said

about the thick sandstone of the Ledges Park. This apparently was not formed in the sea, but in a river. It seems that as the land was raised a river flowing from the north cut a valley into the sediment previously deposited in the sea. Then as the land was again lowered the channel of the stream became choked with sand. This is thought to be the case because most of the sandstone is so massive. It lacks bedding planes, or planes of separation. It apparently was deposited continuously and with little or no interruption. Another feature of the sandstone which confirms this is the "cross-bedding." This shows up in many places on the rock walls. In the cross-bedding the planes of deposition or stratification slope at an angle, often of 20 or 30 degrees. Such cross-bedding shows that the sand of the sandstone must have been deposited by rather swift current such as one would find in a river.

Concretions are a prominent feature of the Ledges sandstone. These are parts of the rock that are more firmly cemented than the surrounding rock. This is a peculiarity of the work of subsurface water. All of the sand has been made into sandstone by the cementing action of subsurface water. With the concretions however, the cement started to deposit to a much greater extent about some small nucleus. Gradually this zone



Jim Sherman Photo.  
If one is in the park during a period of dry weather and there is only a trickle of water in the stream, he has reason to be skeptical about the valley having been made by running water.

of greater cementation spread outward until the concretion was formed.

Some of the concretions are many feet in diameter. They weather less easily than the surrounding sandstone, and so may project from the cliffs. Many of these can be seen. When they fall to the valley floor, as they often do, they may remain for a long while before being broken up by weathering and stream action. Also, when they fall, they may leave recesses in the walls of rock. These may subsequently be enlarged by weathering. Thereupon they are called caves by the youngsters, who delight in crawling into them. Some of these caves may have been enlarged by stream action in an earlier time when the stream was flowing at a higher level.

If one is in the park during a period of dry weather, when there is only a trickle of water in the stream, one might be skeptical about the possibility of the valley having been made by running water. Visit the park when there is a flood however, and it is a different story. In flood times in recent years, the water on the stream-fords through the park has been eight feet deep. Bridges have been swept away, and heavy stone and concrete bridge-piers overturned and carried down stream. The bottom of the valley is now almost 200 feet below the upland.

There is the usual variety of glacial stones in the creek bottom and along the walks in the park. Along with these are the pieces of sandstone, particularly of the concretions, that have not yet been broken up and carried away by the stream. The shelter houses in the park are made of the glacial rocks. They are in great variety, and many of them are of striking beauty.

On some of the cliffs irregular "case-hardening" has taken place.

The surface of the rock has been tightly cemented by deposition from water moving from above down the rock face. The deposition affects only part of the rock surface, but keeps it from weathering away. The rock surface becomes very rough.

There are other Iowa parks which have sandstone of the same sort as the Ledges. These are Wildcat Den in Muscatine County, and Dollywood in Webster. Also, the same kind of sandstone is found here and there along other valleys. Red Rock, on Des Moines River below Des Moines, is named from outcrops of sandstone of this type. There are also cliffs formed of such "channel" sandstone on the Racoon River near Redfield.

With its heavily wooded slopes, its irregular terrain, its heavy population of wildlife, and its interesting geological story, it is no wonder that the Ledges Park is so enthusiastically visited yearly by thousands of people.

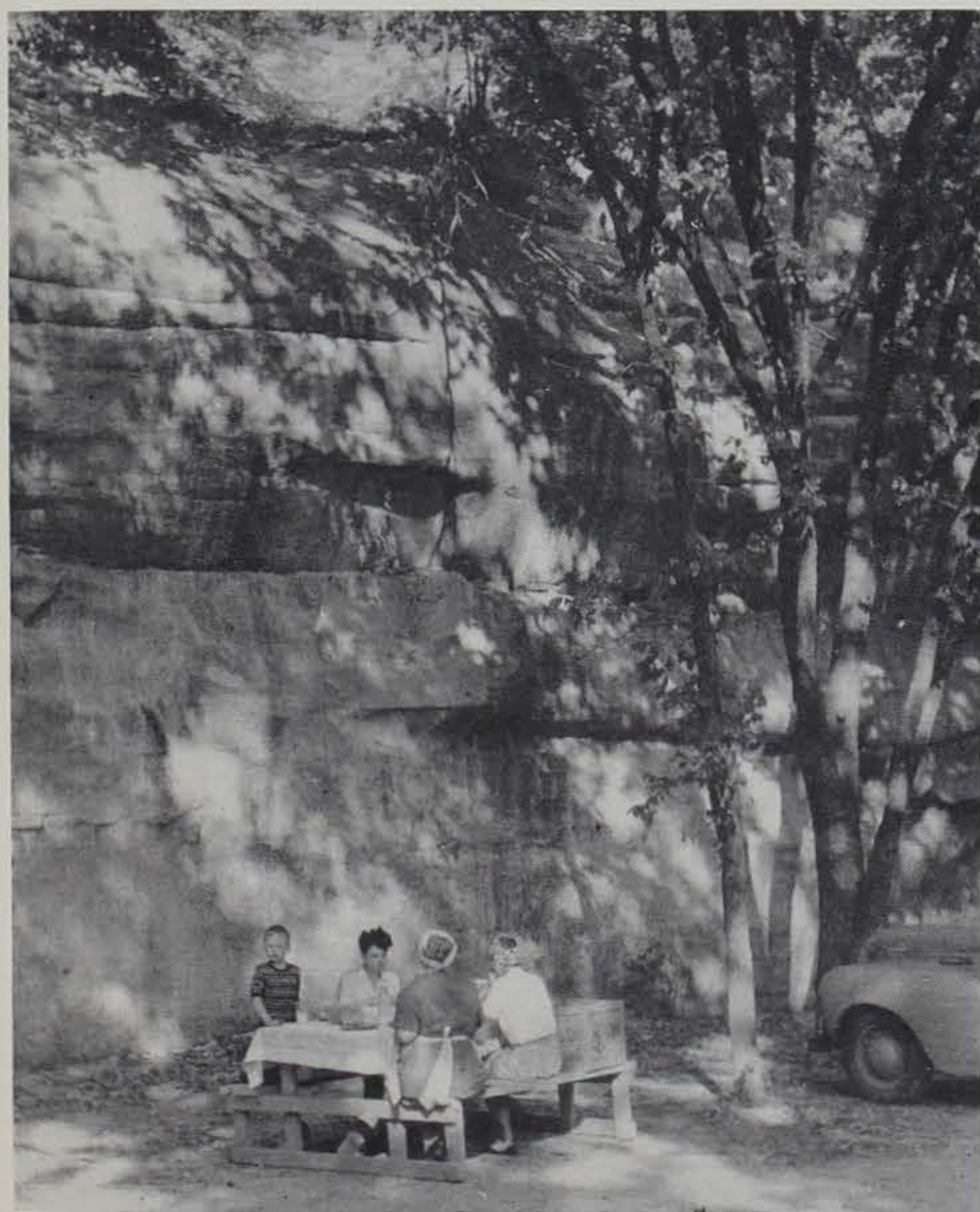
## BUS VS. DEER

Eighteen passengers in a Greyhound bus escaped injury early this morning when the vehicle skidded on wet pavement two miles east of here on Highway 30 and went part way into a ditch.

Deputy Sheriff George Wiskus said the driver, whose name he did not learn, reported swerving the bus to avoid a buck deer crossing the highway about 4 a.m. The bus skidded on the pavement.

The bus was undamaged. The driver brought it to Carroll and transferred his passengers to another bus. The bus was en route to Omaha, Deputy Wiskus said.—Carroll Herald.

"Fishing in Pennsylvania will expand and improve as we carry on our fight for clean streams."—John S. Fine, Governor.

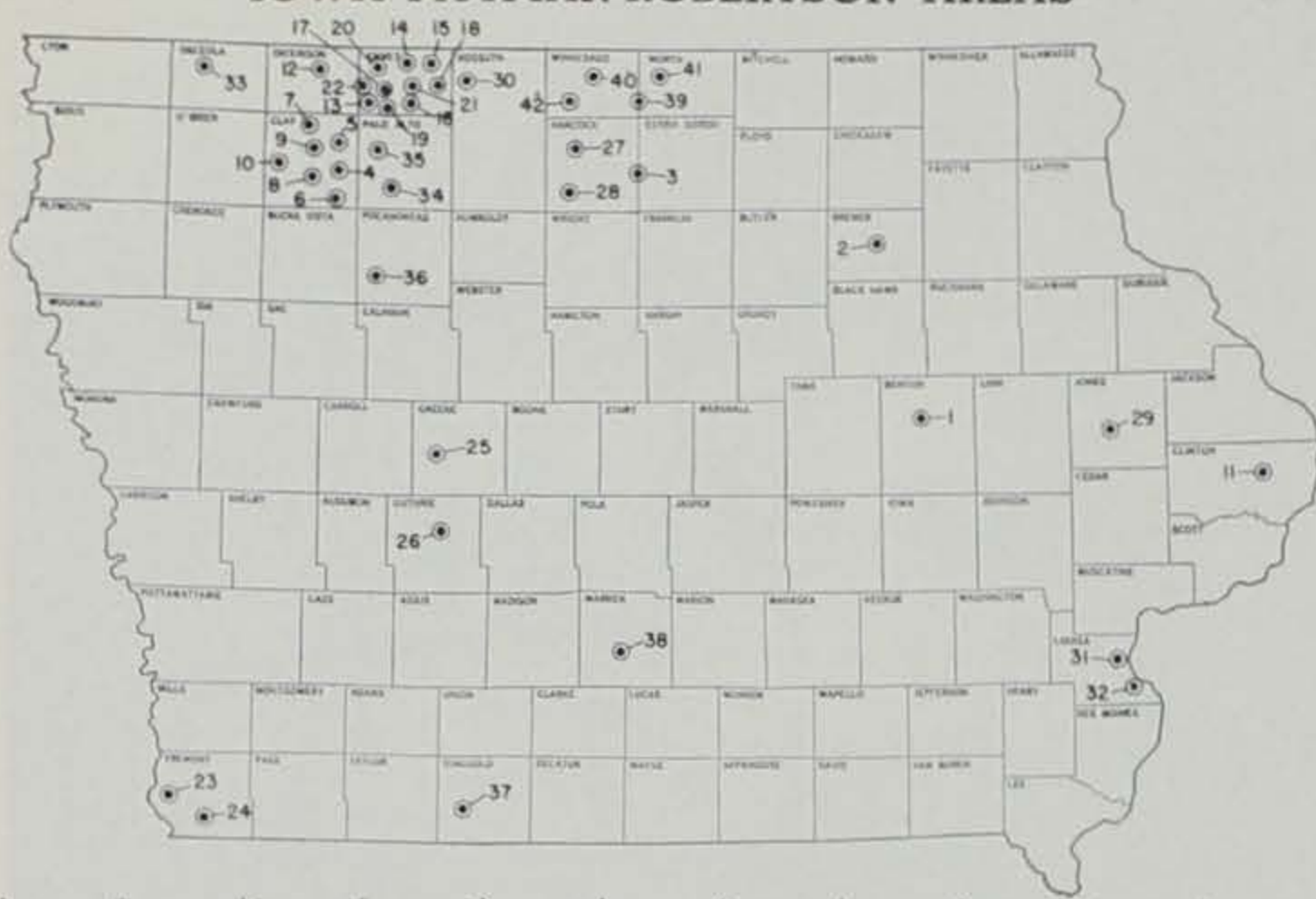


Jim Sherman Photo.

The rocks in the Ledges State Park were not formed in the seas, but in a river. This is believed to be the case because most of the sandstone is massive, lacking bedding planes or planes of separation.



## IOWA PITTMAN-ROBERTSON AREAS



Jim Sherman Photo.  
Fencing and restoration of marsh lands and bogs is of major importance in the Pittman-Robertson program.

## IOWA'S 14 YEARS IN THE PITTMAN-ROBERTSON PROGRAM

By Lester F. Faber  
Supt. of Federal Aid

For fourteen years Iowa has been carrying on Pittman-Robertson Wildlife Restoration Programs. During that period the Federal Government has allotted back to the state of Iowa \$1,509,172.56 from a federal tax of 10 per cent on sporting arms and ammunition. This has been matched with \$503,057.51 from the pockets of Iowa hunters and fishermen through hunting and fishing license fees.

What has been done with this very large sum of money? Where has it been spent, and what do we have to show for it?

Under the terms of the Act, the Conservation Commission is allotted funds to set up programs that will improve hunting in the state. In using these funds the greatest emphasis in Iowa during the 14-year period has been placed on securing public ownership of sub-marginal lands, primarily marsh in character, and in developing these new lands and those already in state ownership, so that they will produce the greatest crops of game birds, game and fur-bearing animals, that modern game management can produce.

In the following table Iowa's Pittman-Robertson Program on public lands is briefly chronicled. On some of the areas work is completed except for maintenance. On some, development for wildlife purposes has only begun. Many additional projects are in the planning stage and additional areas will be acquired and developed as funds for the purpose are allotted by the federal government from year to year.

Development on these wildlife areas is principally fencing, wildlife food and cover planting and engineering developments to control water levels. On some of the areas designed for upland game, small portions are planted to farm crops to provide food and cover for farm type game.

Iowa has the largest percentage of privately-owned land of any

state in the union. Of necessity our more than half a million licensed hunters and fishermen must find outdoor recreation on private-

ly-owned land, yet in 14 years, under the Pittman-Robertson Program alone, 12,000 acres have been made available for public hunting

purposes. In addition, on these areas we have provided the only sure key to increased game for the hunters, more suitable places for game to live.

### IOWA PUBLIC SHOOTING GROUNDS DEVELOPED AND OR ACQUIRED AND DEVELOPED UNDER THE PITTMAN-ROBERTSON PROGRAM

Name of Area	Number on Map	Acres	Type	County	Direction From Nearest Town to Area	Pittman-Robertson Activity
Dudgeon Lake	1	649	Marsh Upland	Benton	1½ m. N. Vinton	Acquisition
Sweet Marsh	2	1566	Marsh	Bremer	1 m. E. Tripoli	Acquisition and Development
Ventura Marsh	3	630	Marsh	Cerro Gordo	½ m. S. Ventura	Acquisition and Development
Barringer Slough	4	1054	Marsh	Clay	2 m. W. 1 m. N. Ruthven	Partial Acquisition and Development
Dewey's Pasture	5	402	Pothole	Clay	2 m. W. 4 m. N. Ruthven	Partial Development
Mud Lake	6	252	Upland	Clay	1 m. S. 4 m. E. Webb	Partial Development
Dan Green Slough	7	340	Marsh	Clay	4 m. E. Langdon	Partial Development
Round Lake	8	450	Marsh	Clay	3 m. W. 3 m. N. Ruthven	Partial Development
Trumbull Lake	9	1230	Marsh	Clay	3 m. W. 4 m. N. Ruthven	Partial Development
Ocheyedan River	10	100	Marsh Upland	Clay	5 m. W. Spencer	Development
Goose Lake	11	433	Marsh	Clinton	½ m. W. Goose Lake	Acquisition
Christopherson Slough	12	196	Marsh	Dickinson	3 mi. N. 1 m. E. Superior	Acquisition
Cheever Lake	13	343	Marsh	Emmet	1 m. W. 2 m. S. Estherville	Partial Development
Birge Lake	14	136	Upland	Emmet	1 m. N. 3 m. W. Dolliver	Partial Development
Grass Lake	15	171	Upland	Emmet	1 m. N. 1 m. W. Dolliver	Partial Development
Ingham High (Other than Lakes)	16	479	Marsh Upland	Emmet	5 m. E. Wallingford	Partial Acquisition, Partial Development
Ryan Lake	17	366	Upland	Emmet	2 m. S. 1 m. W. Gruver	Partial Development
East Swan Lake	18	588	Upland	Emmet	½ m. W. 1 m. S. Maple Hill	Partial Development
Twelve Mile Lake	19	290	Marsh	Emmet	2 m. S. 4 m. W. Wallingford	Partial Development
Eagle Lake	20	...	Marsh	Emmet	1½ m. W. Huntington	Acquisition
West Swan	21	1046	Marsh	Emmet	2 m. E. 2½ m. S. Gruver	Partial Development
Four Mile Lake	22	240	Marsh	Emmet	2½ m. W. Estherville	Partial Acquisition and Development
Forney Lake	23	869	Marsh	Fremont	2 m. N. W. Thurman	Acquisition and Development
Riverton Area	24	721	Marsh	Fremont	1 m. W. Riverton	Acquisition
Dunbar Slough	25	507	Marsh	Greene	½ m. S. 3 m. W. Scranton	Acquisition and Development
Lakin Slough	26	300	Marsh	Guthrie	2 m. E. Yale	Acquisition and Development
Eagle Lake	27	914	Marsh	Hancock	3 m. E. 2½ m. N. Britt	Partial Development
East Twin Lake	28	...	Marsh	Hancock	3 m. E. Kanawha	Partial Development
Muskrat Slough	29	366	Marsh	Jones	1 m. S. 3 m. W. Olin	Acquisition and Development
Goose Lake	30	224	Marsh	Kossuth	5 m. W. 7 m. N. Swea City	Partial Acquisition and Development
Klum Lake	31	1037	Marsh	Louisa	2½ m. E. 1 m. S. Grandview	Acquisition and Development
Lake Odessa	32	*	Marsh	Louisa	3 m. E. 1 m. N. Wapello	Partial Development
Rush Lake	33	337	Marsh	Osceola	1 m. N. ½ m. E. Ocheyedan	Partial Acquisition and Development
Rush Lake	34	522	Marsh	Palo Alto	6 m. N. Laurens	Partial Development
Opedahl Tract	35	115	Marsh	Palo Alto	5 m. N. Ruthven	Partial Development
Sunken Grove	36	371	Marsh Upland	Pocahontas	2 m. S. Varina	Acquisition and Development
Mt. Ayr Area	37	1118	Upland	Ringgold	4 m. W. 1 m. S. Mt. Ayr	Acquisition and Development
Hooper Area	38	323	Upland	Warren	6 m. S. 1 m. W. Indianola	Acquisition and Development
Rice Lake	39	1740	Marsh Upland	Worth	1½ m. S. 1 m. E. Lake Mills	Acquisition and Development
Harmon Lake	40	483	Marsh Upland	Winnebago	4 m. W. ¼ m. S. Searville	Partial Acquisition and Development
Brights Lake	41	123	Upland	Worth	1 m. S. Emmons	Partial Development
Myre's Slough	42	430	Marsh	Winnebago	5 m. S. Thompson	Acquisition and Development

\*Leased from Army Engineer.





During the past several decades walnut timber has been cut faster than it has been grown, principally to help supply lumber for gun stocks and the finest furniture.

## Walnuts...

(Continued from page 177)

with numbers of walnut trees growing, the annual surplus of squirrels is heavily hunted.

In recent years advances in mechanical cracking and picking walnut meats has made them an important crop; the meats being used extensively in ice cream, bakery goods, and as packaged nutmeats. Seven hundred thousand pounds of walnut meats were sold from the Tennessee Valley alone in 1950. Several new walnut cracking plants with large capacity have come into being in recent years in Missouri and the shells have become a valuable by-product used in the manufacture of highgrade charcoal.

The Conservation Commission's walnut planting program during the first year will total a million nuts. The hulled nuts averaging 1,000 to the bushel will mean collection and planting of 1,000 bushels this fall, winter, and spring.

The areas on which fall plantings have been completed at this writing include Red Haw Hill, Lucas County, 12,700; Swan Lake in Carroll County, 30,000; Osceola East Reservoir, Clarke County, 17,000; Allerton Reservoir, Wayne County, 55,000; Geode Park, Des Moines and Henry Counties, 50,000; Union Grove, Tama County, 15,500; Lake Darling, Washington County, 60,000.

At the Rock Creek Lake in Jasper County and the Creston Lake in Union County, both under construction, planting will be done in the spring in cooperation with local organizations. One hundred ninety-six thousand walnuts are to be planted on the Creston Lake area, and 50,000 at Rock Creek Lake.

On fish and game lands almost 500,000 trees are to be planted in late winter and early spring. The list of areas include the following:

Name of Area	County	Number of Walnuts
Little Storm Lake, Buena Vista	1,000	
Pickrel Lake, Buena Vista	500	
Towhead Lake, Calhoun	5,000	
S. Twin Lake, Calhoun	500	
Ventura Marsh, Cerro Gordo	500	
Mud Lake, Clay	2,000	
Round Lake, Clay	500	
Trumbull Lake, Clay	1,000	
Ocheyedan Area, Clay	2,000	
Prairie Lake, Dickinson	500	
Pleasant Lake, Dickinson	1,000	
Swan Lake, Dickinson	1,000	
Christopherson Slough, Dickinson	2,000	
Silver Lake, Dickinson	500	
Cheever Lake, Emmet	1,000	
Birge Lake, Emmet	2,000	
Grass Lake, Emmet	2,000	
Ingham-High Area, Emmet	5,000	
Ryan Lake, Emmet	5,000	
E. Swan Lake, Emmet	3,000	
Four Mile Lake, Emmet	1,000	
E. Twin Lake, Hancock	500	
Little Wall Lake, Hamilton	500	
Iowa River Access, Hardin	500	
Bradgate Area, Humboldt	3,000	
Frank Gotch Area, Humboldt	5,000	
Goose Lake, Kossuth	2,000	
Rush Lake, Osceola	1,000	
Five Island Lake, Palo Alto	500	
Rush Lake, Palo Alto	500	
Clear Lake, Pocahontas	500	
Sunken Grove, Pocahontas	1,000	
Rice Lake, Worth-Winnebagos	6,000	
Harmon Lake, Winnebago	1,000	
Myre's Slough, Winnebago	2,000	
Big Wall Lake, Wright	1,000	
Klum Lake, Louisa	20,000	
Dudgeon Lake, Benton	30,000	
Canoe Creek Access, Winneshiek	10,000	
Wiese Slough, Muscatine	20,000	
Pictured Rock, Jasper	5,000	
Malanaphy Springs, Winneshiek	1,000	
Bluffton Access, Winneshiek	1,000	
Coldwater Springs, Winneshiek	1,000	
Sweet Marsh, Bremer	20,000	
Skunk River Access, Lee	15,000	
Lake O'Dessa, Louisa	1,000	
Allen Green Refuge, Louisa	2,000	
Jasper County Area, Jasper	20,000	
Muskrat Slough, Jones	5,000	
Dunbar Slough, Greene	10,000	
Lakin Slough, Guthrie	3,000	
Goose Lake, Greene	2,000	
Hooper Area, Warren	10,000	
Mount Ayr, Ringgold	100,000	
Forney Lake, Fremont	1,000	
Eldon Area, Davis	50,000	
MacCoon, Jefferson	10,000	
Cottonwood Pits, Monroe	2,000	
Fife Area, Ringgold	40,000	

Conservation of wildlife resources is contingent largely on the crystallization of public sentiment in approval of the protection and preservation of game and fish and their natural habitat.

Dogs perspire through their tongues, so when your dog pants and drips at the tongue in hot weather, he is experiencing a normal condition. Keep plenty of fresh water available for him.

## FISH AT HOME

We are more firmly convinced than ever, after our hurried vacation, that if an angler will fish as many hours in his home waters as he does when in strange waters, he will take more pounds of fish and have just as much fun. All is not peaches and cream in the northern lake regions, even though the country is beautiful, and water always clear. Fish don't jump in the boat up there, any more than they do elsewhere. It takes real work to fill a daily creel limit. But, we'll probably go again, human nature being what it is.—*The Nomad, Davenport Democrat.*

It is estimated that a porcupine is equipped with about 30,000 individual quills.

The entire known world population of whooping cranes winters on the coastal flats of the Arkansas National Wildlife Refuge and vicinity of Texas. There are only 32 surviving!

## EISENHOWER

"So far as the world's food is concerned, all peoples must learn together to make proper use of the earth on which we live. Hovering even now over our shoulders is a specter as sinister as the atomic bomb because it could depopulate the earth and destroy our cities. This creeping terror is the wastage of the world's natural resources and particularly the criminal exploitation of the soil. What will it profit us to achieve the H-bomb and survive that tragedy or triumph if the generations that succeed us must starve in a world, because of our misuse, grown barren as the mountains of the moon?"—*General Dwight D. Eisenhower — Outdoor America.*

## ELEPHANT JAW FOUND NEAR JEFFERSON

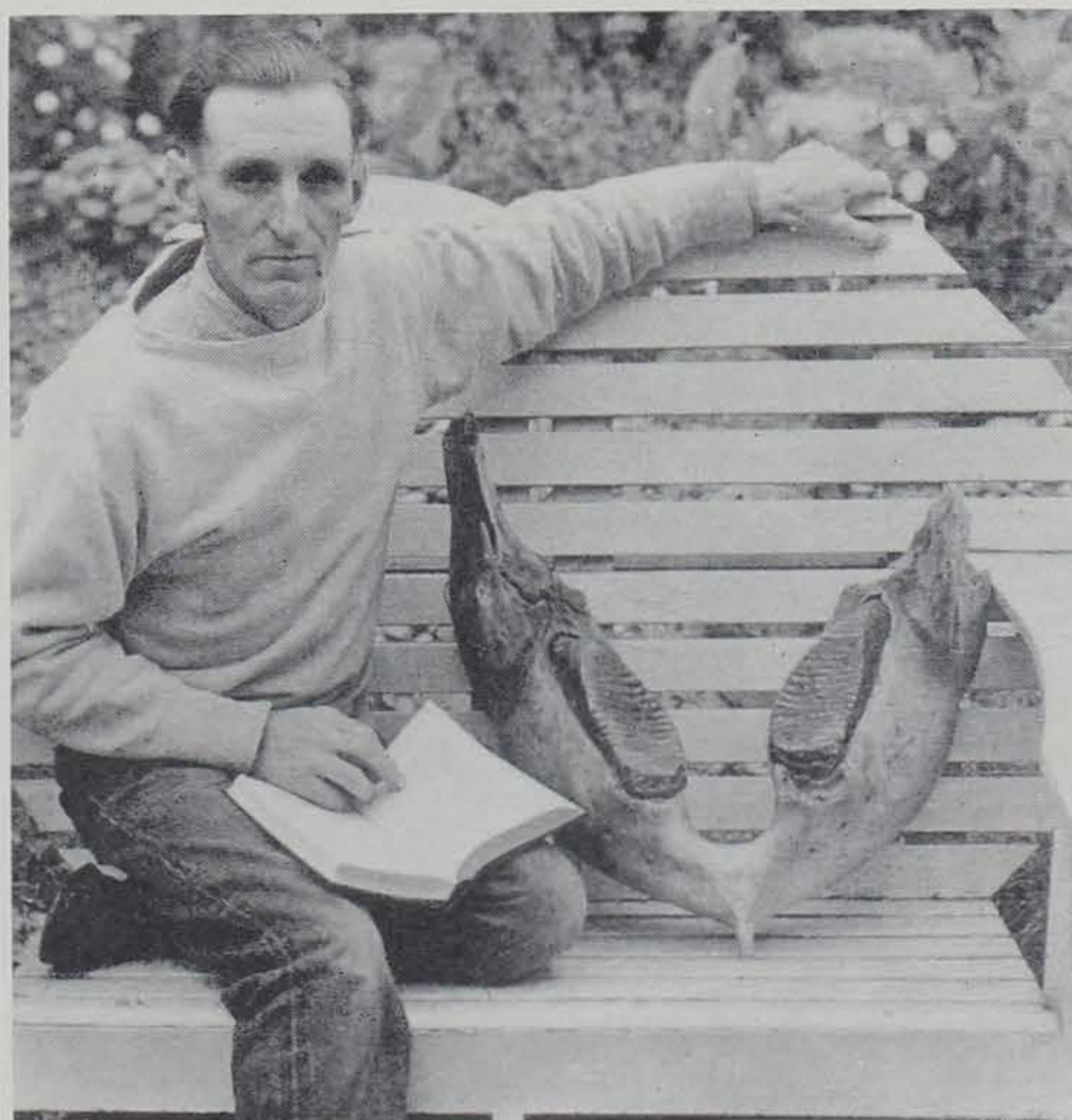
A fifty-five pound lower jaw of one of Iowa's native elephants was recently found by Lynn Deal on his farm four miles southwest of Jefferson. The jaw has been identified as that of the hairy mammoth and is excellently preserved.

The mammoth, one of the now extinct mammals of the Pleistocene Period, dating back some 50,000 years, was about the same size as the modern elephant. It was covered with coarse long hair with a thick woolly undercoat.

During the Pleistocene Iowa had many mammals, now extinct, including horses, camels, musk oxen, and giant beaver. The mastodon and musk oxen are believed to

have lived here during the times that the ice sheets were present, retreating northward as the ice melted.

Most of the remains of these animals are not well preserved and disintegrate upon being exposed to the air. In Siberia and Alaska, however, these ancient animals, especially the heavy mammoth have fallen in ice cracks or bogged in frozen mud and been so well preserved when found that they have been used for dog food. Men have actually eaten the flesh of this animal preserved for many thousand years in nature's ice boxes of the north.



Lynn Deal showing the mammoth jaw bone recently found on his farm near Jefferson.





Figure 1. Chicken and pheasant hybrid produced by crossing a White Leghorn rooster with a ringneck hen.

## Pheasant . . .

(Continued from page 177)

eral hundred hybrids have been raised by different scientists and studied while alive, and their reproductive organs have been studied microscopically after having been killed. Essentially, their sterility is due to the same cause as the mule, namely failure of the reproductive organs to produce normal germ cells.

One sure way to identify a hybrid is to note the absence of the comb and wattles. As can be seen from the accompanying photographs, the comb and wattles are absent. There is a small ridge of bare skin in place of the comb.

### Characters of Hybrids

Using the photographs as a guide, several other characters may be pointed out which are distinctive. The general shape of the body resembles that of a pheasant, especially the flat forehead. The length of the tail may be short like a chicken in some hybrids or long like a pheasant in others. This depends upon what breed of chicken is used in making the cross. The color of the plumage is quite variable and a knowledge of genetics is essential in understanding it, but generally the hybrid has the chicken coloration though the shape of the feathers may be like the pheasant. The hybrid in Figure 1 shows this in respect to the tail feathers. The feathers are white like the leghorn's but when fully grown will be long and straight like the pheasant's. From the photograph it is obvious that the white plumage does not completely mask the dark, as a few dark feathers show through. In this bird, the legs are white, although the leghorns are yellow and the pheasants are dark gray. The weight and size of the hybrids varies considerably. They are usually intermediate between the pheasant and the chicken. The bird in Figure 1 weighs about three pounds. The flight of the chicken and pheasant hybrid is about the

same as a bantam chicken. They are much better fliers than chickens, but not as good as pheasants.

The hybrids may be produced either by using a cock pheasant and chicken hen or a chicken rooster and a hen pheasant. Many times these birds refuse to mate naturally, especially if they are dissimilar in size. The hybrids in the photographs were produced by artificial insemination which is a more efficient method than natural mating.

### Unusual Hybrids

Besides crossing with the chicken, the ringneck pheasant will cross with a number of other game birds. Hybrids between the ringneck and the following species have been recorded: Ruffed grouse, ptarmigan, Dusty grouse, Guinea fowl and several other species of pheasant. Almost without exception these hybrids are sterile.

Several variations of the ringneck are often met with in the field, especially on the opening day of pheasant season. These include

the melanistic or black, the white, and the pied pheasants. The white and pied pheasants are "domestic" varieties, and have been bred in aviaries for many years. The white pheasant is pure white in color, both cock and hen, except for the red face skin and the pearl gray eyes. Due to the eye pigment, these birds are not albinos. Albinism rarely occurs in pheasants and in handling approximately one million pheasants over a period of about 20 years, only one albino pheasant was found by the New York State game farms. The white pheasant appears to be just as hardy as the ringneck in pens, but of course it would not survive long in the wild due to its conspicuousness. The pied pheasant is similar to the regular ringneck except that it has patches of white distributed irregularly over the body. Both of these varieties breed true.

### Melanistic Pheasant

The Melanistic pheasant made its appearance in England in the latter part of the eighteenth century. Whether it was produced by the interbreeding of several races of the ringneck pheasant with the versicolor pheasant, or whether it is a mutation or "sport" of the ringneck pheasant is unknown. Regardless of its ancestry, this bird was found to breed true and has been propagated in captivity since then. Breeders of this bird have selected very dark birds and those with a bottle green sheen instead of blue, and today it is bred in a high state of perfection. This bird has long been a popular game bird in England and has been introduced in Europe, the United States, and Australia.

Two other varieties have been bred from the Mutant since it first made its appearance, the lavender pheasant and the Isabelline or Bohemian pheasant. The lavender pheasant has the entire body washed with a light lavender blue. The Isabelline is a light, buff colored pheasant. Both of these va-

rieties breed true. As far as I know, neither of these races have been released for hunting purposes. Incidentally, anyone interested in history ought to trace the origin of the name "Isabelline."

One other variation which arose in the United States about completes the list of the bewildering color varieties of the ringneck. This bird, the Dilute pheasant, looks very much like a ringneck except for its bleached, washed-out appearance and an orange-yellow caste to its color. Some of these birds have been released simply because they were mistaken for ringnecks.

All of the birds mentioned above, except the Mutant, have been bred from the ringneck and the Mutant in captivity within the last thirty years. This is more evidence for the remarkable diversity of this bird—something which never fails to amaze me when I flush one out of a Lake Erie marsh where by rights nothing but a duck should be, or when a big cock comes scrambling out of a mountain side thicket when one is expecting grouse.—*Ohio Conservation Bulletin*.



If you chance to come in range of a wood pussy's weapons, neutralize his artillery with vinegar.

Marquette, Iowa  
October 1, 1951

Editor,  
Iowa Conservationist  
State Conservation Commission,  
TO "SILENCE" SKUNK SCENT  
Des Moines, Iowa.

Dear Jim:

Many coon hunters and other dog owners don't know the simplest, and at the same time, the most effective of all the odor-squashers, for a dog which has encountered this stinkeroo member of the weasel family. "Give 'em the vinegar works." Yes, strong vinegar is the answer. Wash the infected parts with bulk cider vinegar. If you use bottled vinegar and it is too weak to neutralize the odor at the first washing, rinse again thoroughly and use it again. Results are immediate, perfect and very comforting, not only to the dog, but for all concerned. No need to bury your own clothes, or throw them away if you should be so rash, unwise, or unfortunate as to come within shootin' range of a barrage laid down by a "wood's pussy." If this should remove some of the color just remember this! It will also remove all the odor.

Sincerely,  
Curly Sharp's Baits



Chicken and pheasant hybrid produced by crossing a Rose comb Black Bantam with a ringneck hen.





Who hasn't thrilled on seeing a flock of geese cruising high overhead and become vanishing dots in the autumn haze. Jim Sherman Photo.

## Ducks...

(Continued from page 177)

ing up from the east are at once a signal for advance and retreat: the lovers of the light to come forth and the runners of the night to leave off their prowling.

A few bats are darting experimentally through the thin fog rising from the brown, marsh water, now and then lifting crookedly to catch a victim in the lighter sky above. Away off in the tussocks at my right, a bittern booms a throaty call to his mate, a great blue heron squawks harshly as he lifts his awkward form into the air, all around me in the reeds are vague stirrings—unseen sleepers arousing drowsily to the voice of day.

Several rods down the narrow lane of water, a "rat" house looms dimly. I stare at it, then duck my head quickly as a big marsh owl comes zooming past it, flapping out of the fog to drive by me on noiseless wings. I put my lips to the back of my hand and make a sucking, squeaking sound. He turns instantly and passes me so closely I can almost touch him. I laugh quietly as I see how well my manufactured mouse squeak has fooled his microphone-like ears. As the owl moves on disappointedly, a red-winged blackbird alights near me on a button-bush branch and looks doubtfully my way as he sways. He tilts his head from side to side inquisitively as I silently admire his blazing shoulders. He can't quite make out that brown thing among the bushes.

Old Mr. Muskrat is the next to call. He has been fiddling there around that bit of mud-flat for the past half hour; now he comes straight my way, his funny tail whipping the water, like a screw propeller, the long V of his wake widening behind him as he comes.

I sit close—try even not to bat my eyes as he lands, nearly touching my canvas boots. Does he really see me? Delicate, dancing whiskers, flat file-like tail, chuckle head, and black, hat-pin head eyes! He stares up at my face—I am nearly bursting with laughter as I watch his twitching, sampling nose. If I make the slightest move, he will splash water all over me in frantic retreat. He, too, like the Red Wing can't make me out, for with him, as with most wild creatures, a thing not moving is a thing not to be feared. Presently he turns and takes off again, his black eyes looking back questioningly as he goes.

As the sun's red rim shows first above the trees, I stand up slowly and stretch my cramped legs. At my noise making, a field mouse scurries off into one of his numerous tunnels in the grass at my rear, a Jack-snipe springs shrieking into his crazy, crooked flight, and a couple of coots move guardedly with that peculiar walking-stroke of theirs from the open water into the protecting rushes. On the opposite side of the pool, a belated mallard drake cocks his marvelous green head at me in contemplative mood, and a kingfisher calls noisily as he makes his morning patrol of the pond.

I turn slowly towards the bluff. A marsh wren flutters ahead of me through the tussocks. Dragon flies start up from the grass ahead to begin their day's tireless cruising, and a pair of Red-tailed-hawks sweep lazily by in search of their breakfast. The swamp is awake for the day!

That's the way the swamp looked to me in summer. But in the fall or spring (spring shooting was allowed in those days) what with the ducks and an occasional goose or a flock of quails which would now and then burst like a bomb

from beneath my hurrying feet—well, that swamp was simply irresistible then.

Did any of you ever shoot a muzzle-loader? That is the only sort of weapon I had at first. I carried my powder—black, of course—in a powder-horn slung from my shoulder, and my shot in a bottle in my hip pocket, and a box of percussion caps in another. For wadding, I used newspaper. The ramrod was just the barrel's length when the gun was empty, and I measured the size of the charge by the distance the ramrod protruded when the last wadding was rammed home. Three fingers, as measured on the rod was an ordinary charge; a four-finger load was heavy, and gosh! how it would kick. That black powder made a terrific roar and clouds of smoke; we used to say we were burning soft coal.

I have had a lot of guns since that time, many of them masterpieces of modern gun-making, but somehow or another, none of them thrilled me quite like the old muzzle-loader. Its hammers cocked with a formidable click, and when I thrust that weapon out in front of me, my heart was always hammering hard and my blood pressure high. But to come back to the ducks.

What is more fun or more thrilling than to crawl up on a flock of wary old mallards? You are flat on your belly in the weeds your gun muzzle out in front where it should be, and your dog crawling along side flatter even than you and just as thrilled at the prospect. You glance around at him and laugh at his cautious eagerness. Probably he is laughing, too, in his inscrutable fashion. Both of you are veritable snakes in the grass.

It is hard work this "bull snake crawl" you are making. It hurts your elbows and strains the back of your neck. You keep patting your pockets to see that you're not losing your shells. Presently you stop to get your wind and location. Let's see, they must be just about there. Satisfied, you drop into the grass again and move slowly ahead.



What is more fun than to crawl up on a flock of wary old mallards, your gun muzzle out front and your dog crawling along side even flatter than you are.

—about 40 yards more and—Oh, hang it all! There they go. What could have scared them? That other hunter yonder of course; he didn't know they were there and so came blundering along. "Oh, well, those are the breaks," you say, and go rather grumpily back to your blind.

It doesn't always work that way, though when the ducks are flying. That pair of pin tails yonder for example, are coming in to your puddle just as if they owned the place, and both fold up in that clean-kill, one-two fashion at the twin flashes of your gun. "Wasn't that sweet shooting," you say? It makes up for that lone greenhead that came in awhile back and which kept right on going although you'd have sworn you were dead on.

Wild ducks calling. Yes, and how they call! Remember the time you crawled up to that flock of mallards and made five straight kills when they jumped? You sure had that old pump-gun working that day. Remember the time you were walking along and that single mallard jumped almost from under your feet and you missed her clean with both barrels? Remember when you were crouching in the reeds and had just raised up to see where that lone bluebill had gone and he almost flew into your face? Remember how you carried that dead duck around in your hand for half an hour and when you threw him down to shoot at a cripple he jumped up, and flew off? Remember? Of course you do. You, too, have lived those or similar experiences scores of times. That is one of the chief joys of woods and fields—the indelible memories they leave.

Ulysses said that he was a part of all that he had met. Well, so is every devotee of the outdoors. So is every duck hunter. It may be mid-winter, and everything outside hard-frozen but into our minds come glorious pictures: marvelous, unforgettable fall days, red rushes and brown water, insatiable appetite, tired legs, and a sense of well-being and peace with the world.

Wild ducks calling!



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a year?

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